



59157.8007.US01 Fusion Proteins for Targeted Delivery of Antimicrobial Peptides).ST25.txt

SEQUENCE LISTING

<110> THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

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Anderson, Maxwell
Qi, Fengxia

<120> ANTI-MICROBIAL TARGETING CHIMERIC PHARMACEUTICAL

<130> 59157.8007.US01

<150> US 09/910,358

<151> 2001-07-19

<150> US 09/378,577

<151> 1999-08-20

<160> 31

<170> PatentIn version 3.1

<210> 1

<211> 563

<212> DNA

<213> Artificial sequence

<220>

<223> Synthesized using sequential PCR techniques

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accactcgca cagaggatac tctggtggcg gtggctcggg cgaggtggg tcgggtggcg 180

gcggatccga cgtaaagctt gtggagtctg ggggaggctt agtgaaccct ggagggtccc 240

tgaaactctc ctgtgcagcc tctggattca ctttcagtag ctataccatg tcttgggttc 300

gccagactcc ggagaagagg ctggagtggg tcgcatccat tagtagtggt ggtacttaca 360

cctactatcc agacagtgtg aagggccat tcaccatctc cagagacaat gccaagaaca 420

ccctgtacct gcaaattgacc agtctgaagt ctgaggacac agccatgtat tactgttcaa 480

gagatgacgg ctcctacggc tcctattact atgctatgga ctactgggt caaggaacct 540

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<210> 2

<211> 24

<212> PRT

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<400> 2

59157.8007.US01 Fusion Proteins for Targeted Delivery of Antimicrobial Peptides).ST25.txt

Asp Ser His Ala Lys Arg His His Gly Tyr Lys Arg Lys Phe His Glu
1 5 10 15

Lys His His Ser His Arg Gly Tyr
20

<210> 3
<211> 16
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<220>
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<400> 3

Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser
1 5 10 15

<210> 4
<211> 165
<212> PRT
<213> Artificial sequence

<220>
<223> Synthesized using sequential PCR techniques

<400> 4

Asp Ser His Ala Lys Arg His His Gly Tyr Lys Arg Lys Phe His Glu
1 5 10 15

Lys His His Ser His Arg Gly Tyr Ser Gly Gly Gly Ser Gly Gly
20 25 30

Gly Gly Ser Gly Gly Gly Ser Asp Val Lys Leu Val Glu Ser Gly
35 40 45

Gly Gly Leu Val Asn Pro Gly Gly Ser Leu Lys Leu Ser Cys Ala Ala
50 55 60

Ser Gly Phe Thr Phe Ser Ser Tyr Thr Met Ser Trp Val Arg Gln Thr
65 70 75 80

Pro Glu Lys Arg Leu Glu Trp Val Ala Ser Ile Ser Ser Gly Gly Thr
85 90 95

Tyr Thr Tyr Tyr Pro Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg
100 105 110

Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln Met Thr Ser Leu Lys Ser
115 120 125

Glu Asp Thr Ala Met Tyr Tyr Cys Ser Arg Asp Asp Gly Ser Tyr Gly
130 135 140

Ser Tyr Tyr Tyr Ala Met Asp Tyr Trp Gly Gln Gly Thr Ser Val Thr
145 150 155 160

Val Ser Ser Ala Ser
165

<210> 5
<211> 533
<212> DNA
<213> Artificial sequence

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gtggctcggg cggaggtggg tcgggtggcg gcggatccga cgtgaagctt gtggagtctg 180
ggggaggctt agtgaaccct ggagggtccc taaaactctc ctgtgcagcc tctggattca 240
ctttcagtag ctataccatg tcttgggttc gccagactcc ggagaagagg ctggagtggg 300
tcgcatccat tagtagtggt ggtacttaca cctactatcc agacagtgtg aaggccgat 360
tcaccatctc cagagacaat gccaagaaca ccctgtaccc gcaaattgacc agtctgaagt 420
ctgaggacac agccatgtat tactgttcaa gagatgacgg ctcctacggc tcctattact 480
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<210> 6
<211> 14
<212> PRT
<213> Artificial sequence

<220>
<223> Synthesized using sequential PCR techniques

<400> 6

Lys Arg Leu Phe Lys Glu Leu Lys Phe Ser Leu Arg Lys Tyr
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<210> 7
<211> 155
<212> PRT
<213> Artificial sequence

<220>
<223> Synthesized using sequential PCR techniques

59157.8007.US01 Fusion Proteins for Targeted Delivery of Antimicrobial Peptides).ST25.txt

<400> 7

Lys Arg Leu Phe Lys Glu Leu Lys Phe Ser Leu Arg Lys Tyr Ser Gly
1 5 10 15

Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser Asp Val
20 25 30

Lys Leu Val Glu Ser Gly Gly Leu Val Asn Pro Gly Gly Ser Leu
35 40 45

Lys Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr Thr Met
50 55 60

Ser Trp Val Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val Ala Ser
65 70 75 80

Ile Ser Ser Gly Gly Thr Tyr Thr Tyr Tyr Pro Asp Ser Val Lys Gly
85 90 95

Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Thr Leu Tyr Leu Gln
100 105 110

Met Thr Ser Leu Lys Ser Glu Asp Thr Ala Met Tyr Tyr Cys Ser Arg
115 120 125

Asp Asp Gly Ser Tyr Gly Ser Tyr Tyr Tyr Ala Met Asp Tyr Trp Gly
130 135 140

Gln Gly Thr Ser Val Thr Val Ser Ser Ala Ser
145 150 155

<210> 8

<211> 89

<212> DNA

<213> Artificial sequence

<220>

<223> Primer 986

<400> 8

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ggcggatccg acgtgaagct tgtggagtc 89

<210> 9

<211> 84

<212> DNA

<213> Artificial sequence

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59157.8007.US01 Fusion Proteins for Targeted Delivery of Antimicrobial Peptides).ST25.txt

<223> Primer 987

<400> 9
ggtgtccagt gtgatagcca cgctaagcg caccacggat ataagcgaa gttccacgag 60
aagcaccact cgcacagagg atac 84

<210> 10
<211> 74
<212> DNA
<213> Artificial sequence

<220>
<223> Primer 988

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ccagtgtat agcc 74

<210> 11
<211> 87
<212> DNA
<213> Artificial sequence

<220>
<223> Primer 989

<400> 11
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cggatccgac gtgaagcttg tggagtc 87

<210> 12
<211> 69
<212> DNA
<213> Artificial sequence

<220>
<223> Primer 990

<400> 12
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cgcaagtac 69

<210> 13
<211> 65
<212> DNA
<213> Artificial sequence

<220>
<223> Primer 991

<400> 13
ggatatccac catggacttc gggtttagct tggtttcct tgccttact taaaaggtg 60
tccag 65

59157.8007.US01 Fusion Proteins for Targeted Delivery of Antimicrobial Peptides).ST25.txt

<210> 14
<211> 39
<212> DNA
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<220>
<223> Primer 452

<400> 14
tgggtcgacw gatggggstg ttgtgctagc tgaggagac

39

<210> 15
<211> 18
<212> PRT
<213> Artificial sequence

<220>
<223> Protegrin PG-1

<400> 15

Arg Gly Gly Arg Leu Cys Tyr Cys Arg Arg Arg Phe Cys Val Cys Val
1 5 10 15

Gly Arg

<210> 16
<211> 57
<212> DNA
<213> Artificial sequence

<220>
<223> Protegrin PG-1

<400> 16

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57

<210> 17
<211> 18
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<220>
<223> Novispirin G10

<400> 17

Lys Asn Leu Arg Arg Ile Ile Arg Lys Gly Ile His Ile Ile Lys Lys
1 5 10 15

Tyr Gly

<210> 18
<211> 36

59157.8007.US01 Fusion Proteins for Targeted Delivery of Antimicrobial Peptides).ST25.txt

<212> DNA
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<220>
<223> Forward primer 1

<400> 18
ggtgttgct cttccaaacag gggaggtcgctgtgc 36

<210> 19
<211> 23
<212> DNA
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<223> Reverse primer 2

<400> 19
ccggatccctc gtccgacaca gac 23

<210> 20
<211> 23
<212> DNA
<213> Artificial sequence

<220>
<223> Forward primer 3

<400> 20
ggggatccgg tggcggtggc tcg 23

<210> 21
<211> 26
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<220>
<223> Reverse primer 4

<400> 21
aacatcgata gatccgccgc caccgg 26

<210> 22
<211> 23
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<220>
<223> Forward primer 5

<400> 22
ggatcgatgt tgtgatgacc cag 23

<210> 23
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59157.8007.US01 Fusion Proteins for Targeted Delivery of Antimicrobial Peptides).ST25.txt

<220>
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<210> 24
<211> 29
<212> DNA
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<220>
<223> Forward primer 7

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gcgggtcgac gtgaagctgg tggagtctg 29

<210> 25
<211> 30
<212> DNA
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<220>
<223> Reverse primer 8

<400> 25
gggtgttgag ctagctgaag agacggtgac 30

<210> 26
<211> 24
<212> PRT
<213> Artificial sequence

<220>
<223> Linker 2

<400> 26

Leu Asp Pro Lys Ser Cys Glu Arg Ser His Ser Cys Pro Pro Cys Gly
1 5 10 15

Gly Gly Ser Gly Gly Thr Ser
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<210> 27
<211> 72
<212> DNA
<213> Artificial sequence

<220>
<223> Linker 2

<400> 27
ctcgacccaa agagctgcga gcggagccac agctgccac cgtgcggggg tgggtccggc 60
ggtggcacta gt 72

59157.8007.US01 Fusion Proteins for Targeted Delivery of Antimicrobial Peptides).ST25.txt

<210> 28
<211> 28
<212> DNA
<213> Artificial sequence

<220>
<223> Forward primer 9

<400> 28
gtgggcttagc ctcgacccaa agagctgc 28

<210> 29
<211> 38
<212> DNA
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<220>
<223> Reverse primer 10

<400> 29
agtttctcgg ggctgcccac tagtgccacc gccggacc 38

<210> 30
<211> 19
<212> DNA
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<220>
<223> Forward primer 11

<400> 30
gggcagcccc gagaacaac 19

<210> 31
<211> 33
<212> DNA
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<223> Reverse primer 12

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